

CLAIM LISTINGS

Pursuant to 37 CFR §1.121(c), this listing of the claims, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

Please amend claim 26 as follows:

1 1. (Previously Presented) A terminal registration method using a session initiation protocol,
2 comprising:

3 transmitting a media access control address to a session initiation protocol server by a
4 terminal in a voice over Internet protocol system including the terminal and the session initiation
5 protocol server;

6 retrieving a database comprising terminal information for the terminal in accordance with
7 the media access control address, and transmitting to the terminal, from the session initiation
8 protocol server receiving the media access control address from the terminal, the terminal
9 information for the terminal in accordance with the received media access control address;

10 transmitting to the session initiation protocol server, from the terminal, a register message
11 including the obtained terminal information and including a first predetermined value assigned to
12 a field value of a telephone number field;

13 retrieving the database, and transmitting to the terminal, from the session initiation protocol
14 sever receiving ,from the terminal, the register message including the terminal information and
15 including the first predetermined value assigned to the field value of the telephone number field, a
16 second field value of the telephone number field and user registration information in accordance with
17 the terminal information received from the terminal;

18 requesting, at the terminal, the session initiation protocol server to perform registration by
19 using the user registration information received by the terminal;

20 performing the registration of the terminal, and transmitting to the terminal, from the session
21 initiation protocol server receiving, from the terminal, a registration request signal including the user
22 registration information, a registration success message; and

23 the steps of retrieving the database, and transmitting the user registration information further
24 comprising the sub-steps of:

25 parsing the register message, and requesting a location server,
26 at the session initiation protocol server receiving, from the terminal,
27 the register message including the terminal information and including
28 the first predetermined value, to transmit the user registration
29 information in accordance with the terminal information;

30 retrieving the database, and transmitting to the session
31 initiation protocol server, at the location server requested by the
32 session initiation protocol server to transmit the user registration
33 information, the user registration information in accordance with the
34 terminal information; and

35 transmitting to the terminal, from the session initiation
36 protocol server receiving, from the location server, the user
37 registration information, the received user registration information.

1 2. (Original) The method of claim 1, wherein the terminal information includes Internet
2 protocol address, Subnet, and domain name server information of the terminal.

1 3. (Canceled)

2 4. (Canceled)

3 5. (Previously Presented) The method of claim 1, with the first predetermined value
4 transmitted to the session initiation protocol server from the terminal in the step of transmitting the
5 register message being a predetermined telephone number unused by users.

6 6. (Previously Presented) The method of claim 1, during the transmission of the media
7 access control address from the terminal to the session initiation protocol server, the media access
8 control address being transmitted by using a broadcasting method.

9 7. (Previously Presented) The method of claim 1, wherein the step of retrieving the
10 database, and transmitting terminal information for the terminal comprises the sub-steps of:

11 transmitting to the location server, from the session initiation protocol server receiving the
12 media access control address from the terminal, the received media access control address;

13 retrieving the database, and transmitting to the session initiation protocol server, from the
14 location server receiving the media access control address from the session initiation protocol server,
15 the terminal information in accordance with the received media access control address; and

16 transmitting to the terminal, from the session initiation protocol server receiving the terminal
17 information from the location server, the received terminal information.

18 8. (Canceled)

19 9. (Previously Presented) The method of claim 1, with a message used to transmit the user
20 registration information to the terminal from the proxy server being "401 Error Message".

21 10. (Previously Presented) The method of claim 1, with a message used to carry the user
22 registration information from the session initiation protocol server to the terminal being an error
23 message.

1 11. (Previously Presented) The method of claim 1, wherein the step of performing the
2 registration of the terminal, and transmitting the registration success message comprises the
3 sub-steps of:

4 transmitting to the location server, from the session initiation protocol server receiving, from

5 the terminal, a registration message including the user registration information, the received
6 registration message;

7 comparatively analyzing the registration message by parsing the registration message,
8 performing registration when the registration message is successful, and transmitting to the session
9 initiation protocol server, from the location server, a success message; and

10 transmitting the received success message from the session initiation protocol server to the
11 terminal.

1 12. (Previously Presented) The method of claim 1, wherein a request message comprises at
2 least a sequence number, an identification, and an media access control address; and

3 a response message comprises at least a sequence number, an identification, and a reason.

1 13. (Previously Presented) A computer-readable medium having computer-executable
2 instructions for performing a method, the method comprising:

3 transmitting a first address from a terminal to a session initiation protocol server;

4 retrieving a database containing terminal information for the terminal in accordance with the
5 first address, and transmitting the terminal information for the terminal in accordance with the first
6 address received by the session initiation protocol server;

7 transmitting to the session initiation protocol server, from the terminal, a register message
8 including the terminal information and including a first predetermined value assigned to a field value
9 of a telephone number field;

10 transmitting to the terminal, from the session initiation protocol sever receiving, from the
11 terminal, the register message including the terminal information and including the first
12 predetermined value assigned to the field value of the telephone number field, a second
13 predetermined value of the telephone number field and user registration information in accordance
14 with the terminal information received from the terminal;

15 requesting, at the terminal, the session initiation protocol server to perform registration by

16 using the user registration information received by the terminal;

17 performing the registration of the terminal, and transmitting to the terminal, from the session
18 initiation protocol server receiving, from the terminal, a registration request signal including the user
19 registration information, a registration success message; and

20 the steps of retrieving the database, and transmitting the user registration information further
21 comprising the sub-steps of:

22 parsing the register message, and requesting a location server,
23 at the session initiation protocol server receiving , from the terminal,
24 the register message including the terminal information and including
25 the first predetermined value, to transmit the user registration
26 information in accordance with the terminal information;

27 retrieving the database, and transmitting to the session
28 initiation protocol server, at the location server requested by the
29 session initiation protocol server to transmit the user registration
30 information, the user registration information in accordance with the
31 terminal information; and

32 transmitting to the terminal, from the session initiation
33 protocol server receiving, from the location server, the user
34 registration information, the received user registration information.

1 14. (Previously Presented) The computer-readable medium having computer-executable
2 instructions for performing the method of claim 13, wherein the step of retrieving the database, and
3 transmitting terminal information of the terminal comprises the sub-steps of:

4 transmitting to the location server, from the session initiation protocol server receiving the
5 first address from the terminal, the received first address;

6 retrieving the database, and transmitting to the session initiation protocol server, from the
7 location server receiving the first address from the session initiation protocol server, the terminal

8 information in accordance with the received first address; and
9 transmitting to the terminal, from the session initiation protocol server receiving the terminal
10 information from the location server, the received terminal information.

1 15. (Cancelled)

1 16. (Currently Amended) The computer-readable medium having computer-executable
2 instructions for performing the method of claim 13, with a message used to transmit the user
3 registration information to the terminal from the proxy server being an error message.

1 17. (Previously Presented) The computer-readable medium having computer-executable
2 instructions for performing the method of claim 13, wherein the step of performing the registration
3 of the terminal, and transmitting a registration success message comprises the sub-steps of:

4 transmitting to the location server, from the session initiation protocol server receiving, from
5 the terminal, a registration message including the user registration information, the received
6 registration message;

7 comparatively analyzing the registration message by parsing the registration message,
8 performing registration when the registration message is successful, and transmitting to the session
9 initiation protocol server, from the location server, a success message; and

10 transmitting the received success message from the session initiation protocol server to the
11 terminal.

1 18. (Previously Presented) A computer-readable medium having stored thereon a data
2 structure, comprising:

3 a first field containing data representing a transmission of a media access control address
4 from a terminal to a session initiation protocol server;

5 a second field containing data representing a retrieval of a database comprising terminal

6 information for the terminal in accordance with the media access control address, and a transmission,
7 to the terminal, from the session initiation protocol server receiving the media access control address
8 from the terminal, of the terminal information for the terminal corresponding to the received media
9 access control address;

10 a third field containing data representing a transmission, from the terminal to the session
11 initiation protocol server, of a register message comprising the obtained terminal information and
12 a first predetermined value assigned to a field value of a telephone number field;

13 a fourth field containing data representing a retrieval of a database, and a transmission, to the
14 terminal, from the session initiation protocol sever receiving, from the terminal, the register message
15 comprising the terminal information and the first predetermined value assigned to the field value of
16 the telephone field, of a second predetermined value of the telephone number field and user
17 registration information in accordance with the terminal information received from the terminal;

18 a fifth field containing data representing a request, made by the terminal, for requesting the
19 session initiation protocol server to perform registration by using the received user registration
20 information;

21 a sixth field containing data representing the registration of the terminal, and a transmission,
22 to the terminal, from the session initiation protocol server receiving, from the terminal, a registration
23 request signal including the user registration information, of a registration success message; and

24 the fourth field further comprising:

25 a first sub-field containing data representing a parse of the
26 register message, and a request made by the session initiation protocol
27 server receiving, from the terminal, the register message including the
28 terminal information and including the first predetermined value
29 assigned to the field value of the telephone number field, for
30 requesting a location server to transmit the user registration
31 information in accordance with the terminal information;

32 a second sub-field containing data representing the retrieval

33 of the database, and the transmission, to the proxy server, from the
34 location server requested to transmit the user registration information
35 from the proxy server, of the user registration information in
36 accordance with the terminal information; and

37 a third sub-field containing data representing the transmission,
38 to the terminal, from the proxy server receiving, from the location
39 server, the user registration information, of the received user
40 registration information.

1 19. (Previously Presented) The computer-readable medium having stored thereon the data
2 structure of claim 18, wherein the second field comprises:

3 a fourth sub-field containing data representing a transmission to the location server, from the
4 session initiation protocol server receiving, from the terminal, the media access control address, of
5 a received media access control address;

6 a fifth sub-field containing data representing the retrieval of the database, and a transmission,
7 to the session initiation protocol server, from the location server receiving the media access control
8 address from the proxy server, of the terminal information in accordance with the received media
9 access control address; and

10 a sixth sub-field containing data representing the transmission, to the terminal, from the
11 session initiation protocol server receiving the terminal information from the location server, of the
12 received terminal information.

1 20. (Canceled)

1 21. (Previously Presented) The computer-readable medium having stored thereon the data
2 structure of claim 18, wherein the sixth field comprises:

3 a seventh sub-field containing data representing a transmission, to the location server, from

4 the session initiation protocol server receiving, from the terminal, a registration message including
5 the user registration information, of the received registration message; and

6 an eighth sub-field containing data representing a comparative analysis of the registration
7 message by parsing the registration message, performing registration when the registration message
8 is successful, and transmitting a success message to the session initiation protocol server by the
9 location server.

1 22. (Previously Presented) The computer-readable medium having stored thereon the data
2 structure of claim 21, wherein the sixth field further comprises:

3 a ninth sub-field containing data representing a transmission of the received success message
4 from the session initiation protocol server to the terminal.

1 23. (Previously Presented) A voice over Internet protocol system, comprising:
2 a session initiation protocol server; and
3 a terminal transmitting a media access control address to the session initiation protocol
4 server,

5 with the session initiation protocol server retrieving a database comprising terminal
6 information for the terminal in accordance with the media access control address, and the session
7 initiation protocol server transmitting, to the terminal, the terminal information for the terminal
8 corresponding to the received media access control address,

9 with the terminal transmitting a register message including the obtained terminal information
10 and a first predetermined value assigned to a field value of a telephone number field to the session
11 initiation protocol server,

12 with the session initiation protocol server retrieving the database, and the session initiation
13 protocol server transmitting, to the terminal, a second predetermined value of the telephone number
14 field and user registration information in accordance with the terminal information received from
15 the terminal,

16 with the terminal requesting the session initiation protocol server to perform registration by
17 using the received user registration information, and
18 with the session initiation protocol server performing the registration of the terminal and
19 transmitting a registration success message to the terminal.

1 24. (Original) The system of claim 23, wherein the terminal information includes Internet
2 protocol address, Subnet, and domain name server information of the terminal.

1 25. (Canceled)

1 26. (Currently Amended) The system of claim [[25]] 24, wherein the first predetermined
2 value transmitted to the session initiation protocol server from the terminal in the step of transmitting
1 the register message is an unused telephone number.

1 27. (Previously Presented) A method, comprising:
2 obtaining terminal information, with the step of obtaining the terminal information performed
3 by:

4 obtaining a certain set of information for a terminal and a
5 server by using a media access control address;

6 transmitting to a proxy server, from the terminal and at least
7 one of a plurality of access points, the media control address ;

8 requesting by the proxy server for a location server to transmit
9 terminal information in accordance with a received media access
10 control address;

11 transmitting to the terminal, from the location server, certain
12 information retrieved from a database of the terminal in accordance
13 with the media access control address, and the database comprising

14 the terminal information for the terminal in accordance with the
15 media access control address; and

16 transmitting to the access points, the certain information
17 retrieved from the database of the terminal, and the access points
18 transmitting, to the terminal, the certain information for the terminal
19 and certain information for the access point;

20 obtaining a first telephone number, with the obtaining of the first telephone number
21 performed by:

22 when the terminal receives the terminal information,
23 retransmitting the received terminal information to the proxy server
24 through the access points;

25 setting the first telephone number to a predetermined unused
26 telephone number;

27 considering, by the proxy server, authentication of the first
28 telephone number transmitted from the terminal by the setting of the
29 first telephone number to the predetermined unused telephone
30 number;

31 requesting by the proxy server, the location server to transmit
32 a second telephone number and registration information for the
33 corresponding terminal by transmitting the received terminal
34 information to the location server;

35 transmitting to the proxy server, by the location server, the
36 second telephone number and the registration information for the
37 corresponding terminal by retrieving a database;

38 transmitting the received second telephone number and the
39 registration information to the access point; and

40 transmitting to the terminal, from the access point the second

28. (Previously Presented) The method of claim 27, with the registering of the terminal, comprising:

receiving by the terminal, the second telephone number and the registration information from the proxy server performing a registration process after setting new values, with the terminal encoding the received second telephone number and the registration information to a predetermined format;

transmitting, to the access point, the second telephone number and the registration information by using a register method;

sending by the access point, the second telephone number and the registration information to the proxy server;

receiving by the proxy server, a register message from the terminal, comparing the register message, and when the register message is successful, the proxy server transmitting the register message to the location server, to perform registration; and

transmitting, by the location server, a predetermined successful message after performing the registration, and when any problem is generated, the location server transmitting a predetermined error message, and informing of a reason for the error message.

29. (Original) The method of claim 28, wherein the terminal information includes Internet protocol address, Subnet, and domain name server information of the terminal.

30. (Canceled)

31. (Previously Presented) The method of claim 27, with the registering of the terminal,

2 comprising:

3 receiving by the terminal, the second telephone number and the registration information from

4 the proxy server performing a registration process after setting new values, with the terminal

5 encoding the received telephone number and the registration information to a predetermined format;

6 transmitting, to the access point, the second telephone number and the registration information

7 information by using a register method;

8 sending by the access point, the second telephone number and the registration information

9 to the proxy server;

10 receiving by the proxy server, a register message from the terminal comparing the register

11 message, and when the register message is successful, the proxy server transmitting the register

12 message to the location server, to perform registration; and

13 transmitting, by the location server, a predetermined message informing of a status after

14 performing the registration.